

#19

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1644 1600

RAW SEQUENCE LISTING

DATE: 08/07/2002

PATENT APPLICATION: US/09/419,788A

TIME: 09:58:57

Input Set : A:\2002-07-29 0147-0189P seq list.txt

Output Set: N:\CRF3\08072002\I419788A.raw

3 <110> APPLICANT: FISCHER, Rainer
 4 SCHILLBERG, Stefan
 5 NAHRING, Jorg
 6 SACK, Markus
 7 MONECKE, Michael
 8 LIAO, Yu-Cai
 9 SPIEGEL, Holger
 10 ZIMMERMAN, Sabine
 11 EMANS, Neil
 13 <120> TITLE OF INVENTION: Molecular Pathogenicide Mediated Plant Disease Resistance
 15 <130> FILE REFERENCE: 0147-0189P
 17 <140> CURRENT APPLICATION NUMBER: 09/419,788A
 18 <141> CURRENT FILING DATE: 1999-10-18
 20 <160> NUMBER OF SEQ ID NOS: 168
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 33
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Artificial Sequence
 27 <220> FEATURE:
 28 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
 29 natural origin
 31 <400> SEQUENCE: 1
 32 gccgtcgacg aggacctgaa caaggtgttc cca 33
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 28
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Artificial Sequence
 40 <220> FEATURE:
 41 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
 42 natural origin
 44 <400> SEQUENCE: 2
 45 gcctctagat cagaaatcct ttctcttg 28
 48 <210> SEQ ID NO: 3
 49 <211> LENGTH: 1378
 50 <212> TYPE: DNA
 51 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:
 54 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
 55 natural origin
 57 <400> SEQUENCE: 3
 58 gaattcacac acaatcagat ttatagagag atttataaaa aaaaaaaaaac atatggattt 60
 59 tcaagtgcag attttcagct tcctgctaag cagtgccctca gtcataatat ctaggaggaca 120
 60 aattgtttctc acccagtcctc cagcaatcat gctcgcattt ccaggggaga aggtccacct 180

P.6

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61 gacctgcagt gccagttcaa gtgtaagtaa aatgcaatgg tatcagcaga agtcaggcac 240
62 ctcccccaaa agatggattt atgacacatc caaactggcc tctggagtc ctggctcgtt 300
63 cagtggcagt ggggtctgga cctcttactc totcacaatc agcagcatgg aggctgaaga 360
64 tgctgccact tattactgcc agcagtggag tagtaaccgc ctcacgttcg gtgctgggac 420
65 caagctggag ataaaaggct ctactagtgg ttccgggaag agctctgaag gtaaagggtga 480
66 ggtccagctg cagcagctctg gacctgagct ggtaaatcct ggggcttcag tgaagatgtc 540
67 ctgcaaggcc tctggatata cattcattac ctatgttatg cactgggtga agcagaagcc 600
68 tgggcagggc cttgagtga ttggatatat taatcctaac aaagacggtg caaagttcaa 660
69 tgagaagttc aaaggcaagg ccacactgac ttcagacaaa tctccaaca cagcctacat 720
70 ggagctcagc agcctgacct ctgaggactc tgcggtctat tactgtgcaa gagactatga 780
71 ttacgactgg tttgcttact ggggccaggg gactctgttc actgtctctg cagtcgacga 840
72 ggacctgaac aagggtgttc caccgaggt cgctgtgttt gagccatcag aagcagagat 900
73 ctcccacacc caaaaggcca cactggtgtg cctggccaca ggcttcttcc ctgaccacgt 960
74 ggagctgagc tgggtgggtga atgggaagga ggtgcacagt ggggtcagca cggaccgcga 1020
75 gccctcaag gaggagcccg cctcaatga ctccagatac tgcctgagca gccgcctgag 1080
76 ggtctcggcc accttctggc agaaccctcg caaccacttc cgctgtcaag tccagttcta 1140
77 cgggctctcg gagaatgacg agtggaccca ggatagggcc aaaccctgca cccagatcgt 1200
78 cagcgccgag gcctggggta gaggagactg tggcttaacc tcggtgtcct accagcaagg 1260
79 ggtcctgtct gccaccatcc tctatgagat cctgctaggg aaggccaccc tgtatgctgt 1320
80 gctggtcagt gcccttgtgt tgatggccat ggtcaagaga aaggatttct gatctaga 1378
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84 <211> LENGTH: 17
85 <212> TYPE: DNA
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
90 natural origin
92 <400> SEQUENCE: 4
93 gttttccag tcacgac 17
96 <210> SEQ ID NO: 5
97 <211> LENGTH: 130
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
103 natural origin
105 <400> SEQUENCE: 5
106 ggctctagac gctcgagttt aaaacctata atacacatag atgttgcaat aaagcaaaat 60
107 cagtatacaa atagtcacc agaaatactc octatacttc ttagcggccg cagaacctcc 120
108 acctccgtcg 130
111 <210> SEQ ID NO: 6
112 <211> LENGTH: 148
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
118 natural origin
120 <400> SEQUENCE: 6
121 ggctctagac gctcgagttt agaaatgcct agatctotta atcaagatga agagcatcaa 60

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122 gcaaattccg agcagcgctg ccaagaaagt caccaagagc aaagttcttc ccaatctcct 120
123 agcggccgca gaacctccac ctccgctc 148
126 <210> SEQ ID NO: 7
127 <211> LENGTH: 145
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
133     natural origin
135 <400> SEQUENCE: 7
136 ggctctagac gctcgagttt aatcctctgc catgtagagt ctatacatga gagcaaccac 60
137 gaggctgat atcgctggga tcaccaatt ggtccaccat gaagagttag actcaacagc 120
138 ggccgcagaa cctccacctc cgctcg 145
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 130
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
148     natural origin
150 <400> SEQUENCE: 8
151 ggctctagac gctcgagttt aagtgaagaa ataaataaca ataacaacaa caataatagc 60
152 acaaatagca ccaagcataa tcatcatctt acaattcttc caagcggccg cagaacctcc 120
153 acctccgctc 130
156 <210> SEQ ID NO: 9
157 <211> LENGTH: 17
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
163     natural origin
165 <400> SEQUENCE: 9
166 gttttccag tcacgac 17
169 <210> SEQ ID NO: 10
170 <211> LENGTH: 35
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
176     natural origin
178 <400> SEQUENCE: 10
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182 <210> SEQ ID NO: 11
183 <211> LENGTH: 51
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
189     natural origin

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191 <400> SEQUENCE: 11
192 ggctctagac gctcgagttt aagtgaagaa ataaataaca ataacaacaa c          51
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196 <211> LENGTH: 900
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198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
202     natural origin
204 <400> SEQUENCE: 12
205 gaattcacaa cacaaatcag atttatagag agatttataa aaaaaaaaaa acatatgcaa 60
206 attgtttctca cccagtctcc agcaatcatg tctgcatctc caggggagaa ggtcaccatg 120
207 acctgcagtg ccagttcaag tgtaagtaaa atgcaatggg atcagcagaa gtcaggcacc 180
208 tcccccaaaa gatggattta tgacacatcc aaactggcct ctggagtccc tggctcgcttc 240
209 agtggcagtg ggtctgggac ctcttactct ctcaaatca gcagcatgga ggctgaagat 300
210 gctgccactt attactgcca gcagtggagt agtaaccgcg tcacgttcgg tgctgggacc 360
211 aagctggaga taaaaggctc tactagtggg tccgggaaga gctctgaagg taaaggtgag 420
212 gtccagctgc agcagtctgg acctgagctg gtaaatectg gggcttcagt gaagatgtcc 480
213 tgcaaggcct ctggatacac attcattacc tatgttatgc actgggtgaa gcagaagcct 540
214 gggcagggcc ttgagtggat tggatatatt aatcctaaca aagacggtac aaagttcaat 600
215 gagaagttca aaggcaaggc cacactgact tcagacaaat cctccaacac agcctacatg 660
216 gagctcagca gcctgacctc tgaggactct gcggtctatt actgtgcaag agactatgat 720
217 tacgactggg ttgcttactg gggccagggg actctgggta ctgtctctgc agtcgacgga 780
218 ggtggagggt ctgcggccgc taagaagtat agggagtatt tcttgtggac tatttgtata 840
219 ctgattttgc tttattgcaa catctatgtg tattataggt tttaaactcg agcgtctaga 900
222 <210> SEQ ID NO: 13
223 <211> LENGTH: 918
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
229     natural origin
231 <400> SEQUENCE: 13
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233 attgtttctca cccagtctcc agcaatcatg tctgcatctc caggggagaa ggtcaccatg 120
234 acctgcagtg ccagttcaag tgtaagtaaa atgcaatggg atcagcagaa gtcaggcacc 180
235 tcccccaaaa gatggattta tgacacatcc aaactggcct ctggagtccc tggctcgcttc 240
236 agtggcagtg ggtctgggac ctcttactct ctcaaatca gcagcatgga ggctgaagat 300
237 gctgccactt attactgcca gcagtggagt agtaaccgcg tcacgttcgg tgctgggacc 360
238 aagctggaga taaaaggctc tactagtggg tccgggaaga gctctgaagg taaaggtgag 420
239 gtccagctgc agcagtctgg acctgagctg gtaaatectg gggcttcagt gaagatgtcc 480
240 tgcaaggcct ctggatacac attcattacc tatgttatgc actgggtgaa gcagaagcct 540
241 gggcagggcc ttgagtggat tggatatatt aatcctaaca aagacggtac aaagttcaat 600
242 gagaagttca aaggcaaggc cacactgact tcagacaaat cctccaacac agcctacatg 660
243 gagctcagca gcctgacctc tgaggactct gcggtctatt actgtgcaag agactatgat 720
244 tacgactggg ttgcttactg gggccagggg actctgggta ctgtctctgc agtcgacgga 780
245 ggtggagggt ctgcggccgc taggagattg ggaagaactt tgctcttggg gactttcttg 840
246 gcagcgctgc tcggaatttg cttgatgctc ttcatttga ttaagagatc taggcatttc 900
247 taaactcgag cgtctaga          918

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Input Set : A:\2002-07-29 0147-0189P seq list.txt

Output Set: N:\CRF3\08072002\I419788A.raw

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250 <210> SEQ ID NO: 14
251 <211> LENGTH: 915
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
257     natural origin
259 <400> SEQUENCE: 14
260 gaattcacaa cacaaatcag atttatagag agatttataa aaaaaaaaaa acatatgcaa 60
261 attgtttctca cccagtctcc agcaatcatg tctgcatctc caggggagaa ggtcaccatg 120
262 acctgcagtg ccagttcaag tgtaagtaaa atgcaatggg atcagcagaa gtcaggcacc 180
263 tcccccaaaa gatggattta tgacacatcc aaactggcct ctggagtccc tggtcgcttc 240
264 agtggcagtg ggtctgggac ctcttactct ctcaaatca gcagcatgga ggctgaagat 300
265 gctgccactt attactgcca gcagtggagt agtaaccgc tcacgttcgg tgctgggacc 360
266 aagctggaga taaaaggctc tactagtggg tccgggaaga gctctgaagg taaaggtgag 420
267 gtccagctgc agcagtctgg acctgagctg gtaaatcctg gggcttcagt gaagatgtcc 480
268 tgcaaggcct ctggatacac attcattacc tatgttatgc actgggtgaa gcagaagcct 540
269 gggcagggcc ttgagtggat tggatatatt aatcctaaca aagacggtac aaagttcaat 600
270 gagaagttca aaggcaaggc cacactgact tcagacaaat cctccaacac agcctacatg 660
271 gagctcagca gcctgacctc tgaggactct gcggtctatt actgtgcaag agactatgat 720
272 tacgactggg ttgcttactg gggccagggg actctggtca ctgtctctgc agtcgacgga 780
273 ggtggagggt ctgcggccgc ttgtgagtct aactcttcat ggtggaccaa ttgggtgatc 840
274 ccagcgatat cagcactcgt ggttgctctc atgtatagac tctacatggc agaggattaa 900
275 actcgagcgt ctaga                                     915
278 <210> SEQ ID NO: 15
279 <211> LENGTH: 900
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic, no
285     natural origin
287 <400> SEQUENCE: 15
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289 attgtttctca cccagtctcc agcaatcatg tctgcatctc caggggagaa ggtcaccatg 120
290 acctgcagtg ccagttcaag tgtaagtaaa atgcaatggg atcagcagaa gtcaggcacc 180
291 tcccccaaaa gatggattta tgacacatcc aaactggcct ctggagtccc tggtcgcttc 240
292 agtggcagtg ggtctgggac ctcttactct ctcaaatca gcagcatgga ggctgaagat 300
293 gctgccactt attactgcca gcagtggagt agtaaccgc tcacgttcgg tgctgggacc 360
294 aagctggaga taaaaggctc tactagtggg tccgggaaga gctctgaagg taaaggtgag 420
295 gtccagctgc agcagtctgg acctgagctg gtaaatcctg gggcttcagt gaagatgtcc 480
296 tgcaaggcct ctggatacac attcattacc tatgttatgc actgggtgaa gcagaagcct 540
297 gggcagggcc ttgagtggat tggatatatt aatcctaaca aagacggtac aaagttcaat 600
298 gagaagttca aaggcaaggc cacactgact tcagacaaat cctccaacac agcctacatg 660
299 gagctcagca gcctgacctc tgaggactct gcggtctatt actgtgcaag agactatgat 720
300 tacgactggg ttgcttactg gggccagggg actctggtca ctgtctctgc agtcgacgga 780
301 ggtggagggt ctgcggccgc ttggaagaat tgtaagatga tgattatgct tgggtgctatt 840
302 tgtgtctatta ttgttgttgt tattgttatt tatttcttca cttaaactcg agcgtctaga 900
305 <210> SEQ ID NO: 16
306 <211> LENGTH: 45

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/419,788A

DATE: 08/07/2002
TIME: 09:58:58

Input Set : A:\2002-07-29 0147-0189P seq list.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:117; Xaa Pos. 5
Seq#:119; Xaa Pos. 5
Seq#:123; Xaa Pos. 5
Seq#:124; Xaa Pos. 5
Seq#:125; Xaa Pos. 5
Seq#:127; Xaa Pos. 4
Seq#:128; Xaa Pos. 4
Seq#:131; Xaa Pos. 6
Seq#:132; Xaa Pos. 5

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1
Seq#:164; Line(s) 2919